

## SEQUENCE LISTING

&lt;110&gt; Bayer AG, BHC

&lt;120&gt; Isolated photoprotein bolinopsin, and the use thereof

&lt;130&gt; Le A 36 792

&lt;160&gt; 2

&lt;170&gt; PatentIn version 3.1

&lt;210&gt; 1

&lt;211&gt; 621

&lt;212&gt; DNA

&lt;213&gt; Bolinopsis infundibulum

&lt;400&gt; 1

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atgcctctag acgagaccaa caacgaaagc tatagatggc tgagaagtgt gggtaacgat      60
tggcagtttg atgtcgagga cgttcatcct aaacagctta gtcggctcta caagagattc      120
gacacottcg atctagacag tgacggtcgt atggacatgg acgagatcct gtactggccc      180
gacagaatga ggcagctggt gaacgcttct gacgaacagg tcgagaagat gagggctgct      240
tgctacacct tcttcacaaa caaaggagtg gatccagaaa agggactcct cagagacgac      300
tgggttgagg ctaacagagt atttgctgag gctgaaagag agagggaacg acgtggcatg      360
ccctccttga ttggtctttt gtcagacgct tactacgatg tcctggatga tgacggtgat      420
ggtactgttg atgttgatga actcaaaacc atgatgaagg cttttgatgt gccccaggag      480
gctgcctaca ccttccttaa gaaagctgac acggataata gtggaaaact ggagagaagc      540
gaactgggcc atctcttcag aaagttctgg atggaatcct acgatcctca gtgggacggg      600
gtctacgctt acaaattatta a                                     621

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&lt;210&gt; 2

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; Bolinopsis infundibulum

&lt;400&gt; 2

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Met Pro Leu Asp Glu Thr Asn Asn Glu Ser Tyr Arg Trp Leu Arg Ser
1      5      10      15
Val Gly Asn Asp Trp Gln Phe Asp Val Glu Asp Val His Pro Lys Gln
20      25      30
Leu Ser Arg Leu Tyr Lys Arg Phe Asp Thr Phe Asp Leu Asp Ser Asp
35      40      45
Gly Arg Met Asp Met Asp Glu Ile Leu Tyr Trp Pro Asp Arg Met Arg
50      55      60
Gln Leu Val Asn Ala Ser Asp Glu Gln Val Glu Lys Met Arg Ala Ala
65      70      75      80
Cys Tyr Thr Phe Phe His Asn Lys Gly Val Asp Pro Glu Lys Gly Leu
85      90      95
Leu Arg Asp Asp Trp Val Glu Ala Asn Arg Val Phe Ala Glu Ala Glu
100      105      110
Arg Glu Arg Glu Arg Arg Gly Met Pro Ser Leu Ile Gly Leu Leu Ser
115      120      125
Asp Ala Tyr Tyr Asp Val Leu Asp Asp Asp Gly Asp Gly Thr Val Asp
130      135      140
Val Asp Glu Leu Lys Thr Met Met Lys Ala Phe Asp Val Pro Gln Glu
145      150      155      160
Ala Ala Tyr Thr Phe Phe Lys Lys Ala Asp Thr Asp Asn Ser Gly Lys
165      170      175
Leu Glu Arg Ser Glu Leu Val His Leu Phe Arg Lys Phe Trp Met Glu
180      185      190
Ser Tyr Asp Pro Gln Trp Asp Gly Val Tyr Ala Tyr Lys Tyr
195      200      205

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